

CURRICULUM VITAE

DUANE E. WALISER

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AREAS OF INTEREST

Climate Dynamics, Ocean-Atmosphere Coupling, Tropical Meteorology, Global Climate Modeling, Applications of Observations to Model Evaluation and Improvement, Intraseasonal / Madden-Julian Oscillation (MJO) Variability and Weather-Climate Linkages and Predictability.

EDUCATION

B.S. Physics	Oregon State University, 1985.
B.S. Computer Science	Oregon State University, 1985.
M.S. Physics	University of California, San Diego (UCSD), 1987.
Ph.D. Physical Oceanography	Scripps Institution of Oceanography, UCSD, 1992.

HONORS & AWARDS

JPL Team Bonus Award, Aura MLS Cloud Ice, 2007
NASA Group Achievement Award, Aura MLS Science Team, 2006
JPL Team Bonus Award, EOS MLS Atmospheric Science Publications Team, 2005
NOAA Postdoctoral Fellowship for Climate and Global Change, 1992-93.
National Research Council Research Associate, 1992-93, declined.
NASA Graduate Student Fellowship Recipient, 1988-1991.
Oregon State University College of Science Jesse Hanson Scholarship, 1983-84.
Oregon State University U. G. Dubach Academic Scholarship, 1981-82.
Oregon Scholar, 1980.

PROFESSIONAL EXPERIENCE

2010 - Present: Chief Scientist, Earth Science and Technology Directorate, Jet Propulsion Laboratory, Pasadena, CA.
2007 - Present: Senior Research Scientist, Water and Carbon Cycle Group, Science Division, Jet Propulsion Laboratory, Pasadena, CA.
2007 - Present: Adjunct Professor in the Department of Atmospheric and Oceanic Sciences and Fellow of the Joint Institute for Regional Earth System Science and Engineering (JIFRESSE), University of California, Los Angeles, CA.
2004 - Present: Visiting Associate Faculty, Geological and Planetary Sciences, California Institute of Technology, Pasadena, CA.
2004 - 2007: Principal Scientist, Water and Carbon Cycle Group, Science Division, Jet Propulsion Laboratory, Pasadena, CA.
2004 - Present: Adjunct Associate Professor, Institute for Terrestrial and Planetary Atmospheres, Marine Science Research Center, State University of New York, Stony Brook, NY.
September 1999 – June 2004 Associate Professor, Institute for Terrestrial and Planetary Atmospheres, Marine Science Research Center, State University of New York, Stony Brook.

September 1993 – August 1999: Assistant Professor, Institute for Terrestrial and Planetary Atmospheres, Marine Sciences Research Center, State University of New York, Stony Brook, New York.

June 1992 – August 1993: Postdoctoral Associate, Department of Atmospheric Sciences, University of California, Los Angeles. Support provided by UCAR/NOAA Climate and Global Change Postdoctoral Fellowship Program.

September 1987 – May 1992: Research Assistant / Graduate Student, Physical Oceanography curriculum, Scripps Institution of Oceanography, University of California, San Diego. Support provided in part by NASA Graduate Student Fellowship Program.

April – September 1987 : Research Assistant / Graduate Student in the Physics Department, University of California, San Diego. Model low-thrust/ion-engine vehicle in the Earth-moon system.

September 1986 – March 1987: Teaching Assistant, Department of Physics, University of California, San Diego.

June 1985 – August 1986: Software Engineer, GTE Government Systems, Mountain View, CA.

April 1983 – May 1985: Software Consultant, TGL, Inc., Corvallis, OR.

PROFESSIONAL AFFILIATIONS

Member, American Geophysical Union
 Member. American Meteorological Society

PUBLICATIONS – PEER REVIEWED

- Jury, M. R., and **D. E. Waliser**, 1990: Satellite Microwave Measurements of Atmospheric Water Vapour and Marine Wind Speed: Case Study Application, *S.A.J. Marine Sci.*, 9, 309-316.
- Van Woert, M. L., R. H. Whritner, **D. E. Waliser**, D. H. Bromwich and J. C. Comiso, 1992: The Antarctic Research Center: A Source of Multi-Sensor Satellite Data for Polar Science, *Trans. Amer. Geo. Union*, 73, 65.
- Jury, M. R., B. Pathack and **D. E. Waliser**, 1993: Satellite OLR and Microwave Data as a Proxy for Rainfall in the Southern Africa - Madagascar Region, *Int. J. Clim.*, 13, 257-269.
- Waliser, D. E.**, N. E. Graham, C. Gautier, 1993: Comparison of the Highly Reflective Cloud and Outgoing Longwave Data Sets for use in Estimating Tropical Deep Convection, *J. Climate*, 6, 331-353.
- Waliser, D. E.** and C. Gautier, 1993: A Global Climatology of the ITCZ. *J. Climate*, 6, 2162-2174.
- Waliser, D. E.** and N. E. Graham, 1993: Convective Cloud Systems and Warm-Pool SSTs: Coupled Interactions and Self-Regulation. *J. Geoph. Res.*, 98, 12881-12893.
- Waliser, D. E.**, and R. C. J. Somerville, 1994: The Preferred Latitudes of the Intertropical Convergence Zone. *J. Atmos. Sci.*, 51, 1619-1639.
- Waliser, D. E.**, B. Blanke, J. D. Neelin and C. Gautier, 1994: Shortwave Feedbacks and ENSO: Forced Ocean and Coupled Ocean-Atmosphere Modeling Experiments. *J. Geophys. Res.*, 99, 25109-25125.
- Jury, M. R., B. Pathack, **D. E. Waliser**, 1994: Evolution and Variability of the ITCZ in the SW Indian Ocean: 1988-90, *Theor. Appl. Clim.*, 48, 187-194.
- Waliser, D. E.**, 1996: Formation and Limiting Mechanism for Very High SST: Linking the Dynamics and Thermodynamics. *J. Climate*, 9, 161-188.
- Waliser, D. E.**, 1996: Some Considerations on the Thermostat Hypothesis. *Bull. Amer. Met. Soc.*, 77, 357-360.
- Waliser, D. E.**, W. D. Collins and S. P. Anderson, 1996: An Estimate of the Surface Shortwave Cloud Forcing over the Western Pacific During TOGA COARE. *Geoph. Res. Let.*, 23, 519-522.
- Waliser, D. E.**, 1996: Climate Controls on High Sea Surface Temperatures. *World Resource Review*, 8, 289-310.
- Waliser, D. E.** and W. Zhou, 1997: Removing Satellite Equatorial Crossing Time Biases from the OLR and HRC data sets. *J. Climate*, 10, 2125-2146.

- Jones, C., **D. E. Waliser** and C. Gautier, 1998: The Influence of the Madden Julian Oscillation on Ocean Surface Heat Fluxes and Sea Surface Temperature. *J. Climate*, 11, 1057-1072.
- Waliser, D. E.**, W. K. Lau, J. H. Kim, 1999: The Influence of Coupled Sea Surface Temperatures on the Madden Julian Oscillation: A Model Perturbation Experiment. *J. Atmos. Sci.*, 56, 333-358.
- Waliser, D. E.**, C. Jones, J. K. Schemm and N. E. Graham, 1999: A Statistical Extended-Range Tropical Forecast Model Based on the Slow Evolution of the Madden-Julian Oscillation. *J. of Climate*, 12, 1918-1939.
- Waliser, D. E.**, Z. Shi, J. Lanzante and A. Oort, 1999: The Hadley Circulation: Assessing Reanalysis and Sparse In-Situ Estimates. *Clim. Dyn.*, 15, 719-735..
- Waliser, D. E.**, R. A. Weller, R. D. Cess, 1999: Comparisons Between Buoy-Observed, Satellite-Derived and Modeled Surface Shortwave Flux over the Subtropical North Atlantic During the Subduction Experiment. *J. Geophys. Res.*, 104, 31,301-31,320.
- Waliser, D. E.**, and T. Hogan, 2000: Analysis of NOGAPS Surface Heat Fluxes: Coupling To Convection, Cloud And Dynamical Processes. *J. Geoph. Res.*, 105, 4587-4606.
- Jones, C., **D. E. Waliser**, J. K. Schemm, and W. K. Lau, 2000: Prediction skill of the Madden-Julian Oscillation in Dynamical Extended Range Forecasts. *Climate Dynamics*, 16, 273-289.
- Lucas, L. E., **D. E. Waliser**, J. E. Janowiak, B. Liebmann, 2001: Removing the Satellite Equatorial Crossing Time Biases from the Daily, Global Outgoing Longwave Radiation Data Set. *J. Climate*, 14, 2583-2605.
- Waliser, D. E.**, Z. Zhang, K. M. Lau, and J. H. Kim, 2001: Interannual Sea Surface Temperature Variability and the Predictability of Tropical Intraseasonal Variability. *J. Atmos. Sci.*, 58, 2595-2614.
- Medovaya, M., **D. E. Waliser**, R. A. Weller, M. McPhaden, 2002: Assessing Ocean Buoy Shortwave Observations using Clear-Sky Model Calculations. *J. Geophys. Res.; Oceans.*, 107, No. C2, 10.1029/2000JC000558.
- Kang IS, Jin K, Wang, B., Lau KM, Shukla J, Schubert SD, **Waliser DE**, Krishnamurthy V, Stern WF, Satyan V, Kitoh A, Meeh GA, Kanamitsu M, Galin VY, Kim JK, Sumi A, Wu G, Liu Y, 2002: Intercomparison of the climatological variations of Asian summer monsoon precipitation simulated by 10 GCMs. *Clim. Dym.*, 19, 383-395.
- Kang I.S., Jin K, Lau K.M., Shukla J., Krishnamurthy V., Schubert S.D., **Waliser D.E.**, Stern W.F., Satyan V., Kitoh A., Meeh G.A., Kanamitsu M., Galin V.Y., Kim J.K., Sumi A., Wu G., Liu Y., 2002: Intercomparison of GCM simulated anomalies associated with the 1997-98 El Niño. *J. Climate*, 15, 2791–2805
- Waliser, D. E.**, J. Ridout, S. Xie, and M. Zhang, 2002: Variational Objective Analysis for Atmospheric Field Programs: A Model Assessment, *J. Atmos. Sci.*, 59, 3436-3456.
- Wu, M. L. C., S. Schubert, I. S. Kang, and **D. E. Waliser**, 2002: Forced and Free Intra-Seasonal Variability Over the South Asian Monsoon Region Simulated by 10 AGCMs, *J. Climate*, 15, 2862–2880.
- Myers, D., and **D. E. Waliser**, 2003: Three dimensional water vapor and cloud variations associated with the Madden-Julian Oscillation during Northern Hemisphere winter. *J. Climate*, 16, 929–950.
- Waliser, D. E.**, K. M. Lau, W. Stern, C. Jones, 2003: Potential Predictability of the Madden-Julian Oscillation, *Bull. Amer. Meteor. Soc.*, 84, 33-50.
- Collimore, C. D. W. Martin, M. H. Hitchman, A. Huesmann, and **D. E. Waliser**, 2003: On the Relationship Between the QBO and Tropical Deep Convection, *J. Climate*, 16, No. 15, 2552–2568.
- Waliser, D. E.**, W. Stern, S. Schubert, K. M. Lau, 2003: Dynamic Predictability of Intraseasonal Variability Associated with the Asian Summer Monsoon, *Quart. J. Royal Meteor. Soc.*, 129, 2897–2925

- Waliser, D. E.**, R. Murtugudde, and L. Lucas, 2003: Indo-Pacific Ocean Response to Atmospheric Intraseasonal Variability. Part I: Austral Summer and the Madden-Julian Oscillation, *J. Geoph. Res. – Oceans*, 108, C5, 3160, 10.1029/2002JC001620.
- Waliser, D. E.**, K. Jin, I.-S. Kang, W. F. Stern, S. D. Schubert, M.L.C. Wu, K.-M. Lau, M.-I. Lee, V. Krishnamurthy, A. Kitoh, G. A. Meehl, V. Y. Galin, V. Satyan, S. K. Mandke, G. Wu, Y. Liu, and C.-K. Park, 2003: AGCM Simulations of Intraseasonal Variability Associated with the Asian Summer Monsoon, *Clim. Dyn.*, 21, 423-446.
- Jones, C., L. M. V. Carvalho, R. W. Higgins, **D. E. Waliser**, and J.-K. E. Schemm, 2004: Climatology of tropical intraseasonal convective anomalies. *J. Climate*, 17, 523-539.
- Jones, C., **D. E. Waliser**, K. M. Lau, and W. Stern, 2004: The Madden-Julian Oscillation and its Impact on Northern Hemisphere Weather Predictability, *Mon. Wea. Rev.*, 132, 6, 1462–1471.
- Waliser, D. E.**, R. Murtugudde, and L. Lucas, 2004: Indo-Pacific Ocean Response to Atmospheric Intraseasonal Variability. Part II: Boreal Summer and the Intraseasonal Oscillation, *J. Geoph. Res. – Oceans*, 109, C03030, 10.1029/2003JC002002.
- Jones, C., L. M. V. Carvalho, R. W. Higgins, **D. E. Waliser**, and J.-K. E. Schemm, 2004: A Statistical Forecast Model of Tropical Intraseasonal Convective Anomalies. *J. Climate*: 17, 11, 2078–2095.
- Zheng, Y., **D. E. Waliser**, W. Stern, and C. Jones, 2004: The Role of Coupled Sea Surface Temperatures in the Simulation of the Tropical Intraseasonal Oscillation, *J. Climate*, 17, 4109-4134.
- Jones, C., **D. E. Waliser**, K.-M. Lau and W. Stern, 2004: Global Occurrences of Extreme Precipitation and the Madden-Julian Oscillation: Observations and Predictability, *J. Climate*, 17, 4575-4589
- Liess, S., **D. E. Waliser**, and S. Schubert, 2005: Predictability studies of the intraseasonal oscillation with the ECHAM5 GCM. *J. Atmos. Sci.*, 62, 3320-3336.
- Waliser, D. E.**, R. Murtugudde, P. Strutton, J.-L. Li, 2005, Subseasonal Organization of Ocean Chlorophyll: Prospects for Prediction Based on the Madden-Julian Oscillation, *Geoph. Res. Lett.*, 32, L23602, doi:10.1029/2005GL024300.
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- Jiang, X., D. B. A. Jones, R. Shia, **D. E. Waliser**, and Y. L. Yung, 2005, Spatial Patterns and Mechanisms of the Quasi-biennial Oscillation - Annual Beat of Ozone, *J. Geophys. Res.*, 110, D23308, doi:10.1029/2005JD006055.
- Wu, M.-L. C., S. D. Schubert, M. J. Suarez, P. J. Pegion, and **D. E. Waliser**, 2005: Seasonality and Meridional Propagation of the MJO. *J. Climate*, *J. Atmos. Sci.*, 19, 1901-1921.
- Waliser, D. E.**, K. Weickmann, R. Dole, S. Schubert, O. Alves, C. Jones, M. Newman, H.-L. Pan, A. Roubicek, S. Saha, C. Smith, H. van den Dool, F. Vitart, M. Wheeler, J. Whitaker, 2006: The Experimental MJO Prediction Project. *Bull. Amer. Meteorol. Soc.*, 87, 425-431.
- Tian, B., **D. E. Waliser**, E. Fetzer, B. Lambriksen, Y. Yung, and B. Wang, 2006: Vertical Moist Thermodynamic Structure and Spatial-temporal Evolution of the Madden-Julian Oscillation in Atmospheric Infrared Sounder Observations. *J. Atmos. Sci.*, 63, 10, 2462-2485.
- Lin, X., J.-L. Li, M. J. Suarez, A. M. Tompkins, **D. E. Waliser**, M. M. Rienecker, J. Bacmeister, J. Jiang, H.-T. Wu, C. M. Tassone, J. D. Chern, B. D. Chen, and H. Su, 2006: A View of Hurricane Katrina with Early 21st Century Technology, *EOS*, 87, No. 41, 433.
- Su, H., **D. E. Waliser**, J. H. Jiang, J.-L. Li, W. G. Read, J. W. Waters, A. Tompkins, 2006: Relationships among upper tropospheric water vapor, clouds and SST: MLS observations, ECMWF analyses and GCM simulations, *Geophys. Res. Lett.*, 33, L22802, doi:10.1029/2006GL027582.
- Tian, B., **D. E. Waliser**, E. Fetzer, 2006: Modulation of the Diurnal Cycle of Deep Convective Clouds by the Madden-Julian Oscillation. *Geophys. Res. Lett.*, 30, L20704, 10.1029/2006GL027752.

- Fu, X., B. Wang, **D. E. Waliser**, and T. Li, 2007: Impact of Atmosphere-Ocean Coupling on the Predictability of Monsoon Intraseasonal Oscillations (MISO), *J. Atmos. Sci.*, 64, 157–174.
- Li, J.-L., J. H. Jiang, **D. E. Waliser**, A. Tompkins, 2007: Assessing Consistency between EOS MLS and ECMWF Analyzed and Forecast Estimates of Cloud Ice, *Geoph. Res. Lett.*, 34, L08701, doi:10.1029/2006GL029022.
- Tian, B., Y. L. Yung, **D. E. Waliser**, T. Tyranowski, L. Kuai, E. J. Fetzer, and F. W. Irion, 2007: Intraseasonal variations of the tropical total ozone and their connection to the MJO. *Geophys. Res. Lett.*, 34, L08704, 10.1029/2007GL029471.
- Waliser, D. E.**, K. Seo, S. Schubert, E. Njoku, 2007: Global Water Cycle Agreement in IPCC AR4 Model Simulations, *Geoph. Res. Lett.*, 34, L16705, doi:10.1029/2007GL030675.
- Seo, K., C. R. Wilson, J. Chen and **D. E. Waliser**, 2008: GRACE's spatial aliasing error, *Geophys. J. Int.*, 172, 41-48, doi: 10.1111j.1365-246X.2007.03611.x.
- Wu, D. L., J. H. Jiang, R. T. Austin, M. Deng, S. L. Durden, A. J. Heymsfield, B. H. Kahn, J.-L. Li, G. G. Mace, G. M. McFarquhar, C. J. Nankervis, H. C. Pumphrey, W. G. Read, G. L. Stephens, S. Tanelli, D. G. Vane, **D. E. Waliser**, and J. W. Waters, 2008: Aura MLS cloud ice measurements and comparisons with CloudSat and other correlative data. *J. Geophys. Res.*, In Press.
- Seo, K., C. R. Wilson, S.-C. Han and **D. E. Waliser**, 2008: Gravity Recovery and Climate Experiment (GRACE) alias error from ocean tides. *J. Geophys. Res.*, 113, B03405, doi:10.1029/2006JB004747.
- Jiang, X., **D. E. Waliser**, M. C. Wheeler, C. Jones, M.-I. Lee, S. D. Schubert, 2008, Assessing the Skill of an All-Season Statistical Forecast Model for the Madden-Julian Oscillation, *Mon. Wea. Rev.*, 136, 1940-1956.
- Tian, B. J., **D. E. Waliser**, R. A. Kahn, Q. B. Li, Y. L. Yung, T. Tyranowski, I. V. Geogdzhav, M. I. Mishchenko, O. Torres, and A. Smirnov, 2008: Does the Madden-Julian Oscillation influence aerosol variability?, *J. Geophys. Res.*, doi:10.1029/2007JD009372.
- Schwartz, M. J., **D. E. Waliser**, B. Tian, J. F. Li, D. L. Wu, J. H. Jiang, and W. G. Read, 2008: MJO in EOS MLS cloud ice and water vapor. *Geophys. Res. Lett.*, 35, L08812, doi:10.1029/2008GL033675.
- Vavrus, S., and **D. E. Waliser**, 2008: An improved parameterization for simulating Arctic cloud amount in the CCSM3 climate model. *J. Climate*. 21(21): 5673.
- Jiang, X., and **D. E. Waliser**, 2008, Northward Propagation of the Subseasonal Variability over the Eastern Pacific Warm Pool, *Geophys. Res. Lett.*, doi:10.1029/2008GL033723.
- Woods, C. P., **D. E. Waliser**, J.-L. Li, R. T. Austin, G. L. Stephens, D. G. Vane, 2008, Evaluating CloudSat Ice Water Content Retrievals Using a Cloud Resolving Model: Sensitivities to Frozen Particle Properties, *J. Geophys. Res. Special CloudSat Section*, 113, D00A11, doi:10.1029/2008JD009941.
- Li, J.-F., **D. E. Waliser**, C. Woods, J. Teixeira, J. Bacmeister, J. Chern, B. W. Shen, A. Tompkins, and M. Kohler, 2008: Comparisons of Satellites Liquid Water Estimates with ECMWF and GMAO Analyses, 20th Century IPCC AR4 Climate Simulations, and GCM Simulations. *Geophys. Res. Lett.*, 35, L19710, doi:10.1029/2008GL035427.
- Sperber, K.R., and **D. E. Waliser**, 2008: New Approaches to Understanding, Simulating, and Forecasting the Madden-Julian Oscillation, *Bulletin of the American Meteorology Society*, DOI: 10.1175/2008BAMS2700.1.
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- Vavrus S., **D. E. Waliser**, A. Schweiger, J. Francis, 2008: Simulations of 20th and 21st century Arctic cloud amount in the global climate models assessed in the IPCC AR4, Climate Dynamics, DOI 10.1007/s00382-008-0475-6.
- Waliser, D. E.**, J. F. Li, C. Woods, R. Austin, J. Bacmeister, J. Chern, A. Del Genio, J. Jiang, Z. Kuang, H. Meng, P. Minnis, S. Platnick, W.B. Rossow, G. Stephens, S. Sun-Mack, W.K. Tao, A. Tompkins, D. Vane, C. Walker, D. Wu, 2009: Cloud Ice: A Climate Model Challenge With Signs and Expectations of Progress, *J. Geophys. Res.- CloudSat Special Section*, 114, D00A21, doi:10.1029/2008JD010015.
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- Tao, W.-K., J.-D. Chern, R. Atlas, D. Randall, M. Khairoutdinov, J.-L. Li, **D. E. Waliser**, A. Hou, X. Lin, C. Peters-Lidard, W. Lau, J. Jiang, and J. Simpson, 2009: A Multi-scale Modeling System: Developments, Applications and Critical Issues. *Bull. Amer. Meteor. Soc.* 90, 515-534.
- Liu, P., Y. Kajikawa, B. Wang, A. Kitoh, T. Yasunari, T. Li, H. Annamalai, X. Fu, K. Kikuchi, R. Mizuta, K. Rajendran, **D. E. Waliser**, D. Kim, 2009: Tropical Intraseasonal Variability in the MRI-20km60L AGCM. *J. Climate*, 22, 2006–2022, doi: 10.1175/2008JCLI2406.1.
- CLIVAR Madden-Julian Oscillation Working Group**, 2009: MJO Simulation Diagnostics, *J. Clim.*, 22, DOI: 10.1175/2008JCLI2731.1.
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- Waliser, D.**, J. Kim, Y. Xue, Chao, Y., A. Eldering, R. Fovell, A. Hall, Q. Li, K. Liou, J. McWilliams, S. Kapnick, R. Vasic, Fs. De Sale, and Y. Yu, 2009, Simulating the Sierra Nevada snowpack: The impact of snow albedo and multi-layer snow physics, Biennial California Climate Change Center Report, CEC-500-2008-XXX.
- Kim, J., Y. Chao, A. Eldering, R. Fovell, A. Hall, Q. Li, K. Liou, J. McWilliams, **D. Waliser**, Y. Xue, and Sarah Kapnick, 2009: A projection of the cold season hydroclimate in California in mid-21st century under the SRES-A1B emission scenario, Biennial California Climate Change Center Report, CEC-500-2008-XXX.
- Jiang, X., **D. E. Waliser**, W. S. Olson, W.-K. Tao, T. S. L'Ecuyer, J.-L. Li, B. Tian, Y. L. Yung, A. M. Tompkins, S. E. Lang, and M. Grecu, 2009: Vertical Heating Structures Associated with the MJO as Characterized by TRMM Estimates, ECMWF Reanalyses and Forecasts: A Case Study during 1998-99 Winter, *J. Climate - TRMM heating special section*, 22, 6001-6022, doi:10.1175/2009JCLI3048.1.
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PUBLICATIONS – SUBMITTED OR IN PREPARATION

- Jiang, X., **D. E. Waliser**, R.L. Shia, Y.L. Yung, 2009: Distinguishing Climate Change from Natural Variability in the Stratosphere, *Geoph. Res. Lett.*, Submitted.
- Seo, K., **D. E. Waliser**, B. Tian, 2007: Global trends of fresh water discharge and evapotranspiration revealed by space-based observations. *GRL*, Under Revision.
- Tian, B. **D. E. Waliser**, X. Xie, W. T. Liu, and E. J. Fetzer, 2009: On the Low-level Moisture Preconditioning of the Madden-Julian Oscillation, *Geoph. Res. Letters*, Submitted.
- Woods, C. P., J.-L. Li, **D. E. Waliser**, and A. Tompkins, 2009: Partitioning CloudSat Ice Water Content for Comparison with Upper-Tropospheric Cloud Ice in Global Atmospheric Models, *Geophys. Res. Lett.*, Submitted.
- J.-L. F. Li, J. Teixeira, **D. E. Waliser**, C. Woods, D. G. Vane, J. Bacmeister, J. Chern, W.-K. Tao, B.-W. Shen, S. Cardoso, A. M. Tompkins, R. Forbes, M. Kohlor, 2010: Comparison of Vertical Structures of clouds in two models, ECMWF analysis, and CloudSat data along the GEWEX Pacific Cross Section, *Geoph. Res. Letters*, Submitted.
- Waliser, D. E.**, J.-L. F. Li, T. L'Ecuyer, W. T. Chen, W. L. Li, 2010: Estimating the Radiative Impact Of Ice Mass in Convective Clouds And Precipitation, *Geoph. Res. Letters*, Submitted.
- Kubar, T. L., **D. E. Waliser**, J.-L. Li, 2010: Understanding the Boundary Layer and Cloud Structure and Dynamic and Stability Controls on Low Cloud Cover in the Tropics and Subtropics Using A-Train Satellite Data and ECMWF Analyses, *J. Atmos. Sci.*, Submitted.
- Ao, C. S. Chan, D. Waliser, J.-L. F. Li, B. Tian, A. Tompkins, M. Kohler and J. Teixeira, 2010: Planetary Boundary Layer Height from GPS Water Vapor Profiles, *Geoph. Res. Letters*, In Prep.
- Guan, B., N. Molotch, **D. E. Waliser**, E. Fetzer, and P. Neiman, 2010: Atmospheric Rivers and Snow Accumulation in the Sierra Nevada Connected by Surface Air Temperature, *Geoph. Res. Let.*, Submitted.

PUBLICATIONS – BOOK

- Waliser, D. E.**, 2002, Tropical Meteorology: Intertropical Convergence Zones (ITCZ). *Encyclopedia of Atmospheric Sciences*. Edited by J. Holton, J. Pyle, J. Curry. Academic Press.
- Lau, W. K. M. and **D. E. Waliser**, Eds., 2005: Intraseasonal Variability of the Atmosphere-Ocean Climate System, Springer, Heidelberg, Germany, 474.
- Lau, W. K. M. and **D. E. Waliser**, Eds., 2010: Intraseasonal Variability of the Atmosphere-Ocean Climate System, Springer, Heidelberg, Germany,. 2nd Edition – In Preparation.
- Waliser, D. E.**, 2005: Predictability and Forecasting. Intraseasonal Variability of the Atmosphere-Ocean

- Climate System, W. K. M. Lau and **D. E. Waliser**, Eds., Springer, Heidelberg, Germany, 474.
- Waliser, D. E.**, 2006: Intraseasonal Variability. Asian Monsoon, Editor Bin Wang., Springer, Heidelberg, Germany, 787.
- Waliser, D. E.**, 2006: Predictability of Tropical Intraseasonal Variability. Predictability of Weather and Climate, T. Palmer and R. Hagedorn, Eds., Cambridge University Press, 718.
- Tian, B., and **D. E. Waliser**, 2010: Madden-Julian Oscillation. Encyclopedia of Remote Sensing, Edited by Eni Njoku, Springer, submitted.

PUBLICATIONS – OTHER

- Waliser, D. E.**, 1992: The Preferred Latitudes of the Intertropical Convergence Zone: Observations and Theory. Ph.D. Dissertation, Scripps Institution of Oceanography, Univ. of Calif, San Diego, 1992, 170pp.
- Waliser, D. E.**, C. R. Mechoso, C. Gautier and J. D. Neelin, "A Simple Research Paradigm in the Context of the Sequoia 2000 Project and its Application to an Ocean-Atmosphere Interaction Study," *Sequoia 2000 Technical Report*, Univ. of Calif., Berkeley, June 1993.
- Waliser, D. E.**, and C. Gautier, 1993: Comparison of Buoy and SSM/I-Derived Wind Speeds in the Tropical Pacific. *TOGA Notes*. July, Number 12.
- Schubert, S., R. Dole, H.v.d. Dool, M. Suarez, and **D. Waliser**, Proceedings from a workshop on "Prospects for improved forecasts of weather and short-term climate variability on subseasonal (2 week to 2 month) time scales", 16-18 April 2002, Mitchellville, MD, NASA/TM 2002-104606, vol. 23, pp. 171, NASA, Goddard Space Flight Center, Greenbelt, MD, 2002.
- Waliser, D. E.**, S. Schubert, A. Kumar, K. Weickmann, and R. Dole, Proceedings from a workshop on "Modeling, Simulation and Forecasting of Subseasonal Variability", 4-5 June 2003, University of Maryland, College Park, Maryland, NASA/CP 2003-104606, vol. 25, pp. 62, NASA, Goddard Space Flight Center, Greenbelt, MD, 2003.
- Waliser, D. E.**, 2005: Intraseasonal Variability. In, The Global Monsoon System: Research and Forecast, WMO/TD No. 1266 and TMRP Report No. 70, 403-439. Derived from a report to the WMO Third International Workshop on Monsoons, 2-6 November 2004, Hangzhou, China.
- Waliser, D. E.**, and K R Sperber, 2006: US CLIVAR Madden-Julian Oscillation Working Group (MJOWG). CLIVAR Exchanges No 38, page 7.
- Waliser, D. E.**, and K R Sperber, 2006: US CLIVAR Madden-Julian Oscillation Working Group (MJOWG) Meeting Report. *U.S. CLIVAR Variations*, Vol. 4, No. 3, pp. 6-7
- Waliser, D. E.**, and M. Moncrieff, 2007, Year of Tropical Convection – A Joint WCRP-THORPEX Activity to Address the Challenge of Tropical Convection. WCRP GEWEX News, Vol. 17, No. 2, page 8.
- Brunet, G., R. Dole, B. Hoskins, G. Kiladis, B. Kirtman, M. Moncrieff, R. E. Morss, S. Polaravapu, M. Shapiro, J. Slingo, I. Szunyogh, and **D. Waliser**. Toward A Seamless Process for the Prediction of Weather and Climate, White Paper Submitted to the WMO Programs WWRP-THORPEX and WCRP.
- Goswami, B.N., M. Wheeler, J. Gottschalck, and **D. E. Waliser**, 2008, Intraseasonal Variability and Forecasting: A Review of Recent Research, WMO Fourth International Workshop on Monsoons, 20-15 October 2008, Beijing, China. To appear as a WMO Tech. Report..
- Waliser, D. E.**, and M. Moncrieff, 2008, The Year of Tropical Convection (YOTC) Science Plan: A joint WCRP - WWRP/THORPEX International Initiative. WMO/TD No. 1452, WCRP - 130, WWRP/THORPEX - No 9. WMO, Geneva, Switzerland.
- D. E. Waliser** and Sperber, K.R, 2008: Recent accomplishments of the US CLIVAR MJO Working Group (MJOWG), UCLA Tropical Meteorology Newsletter, Issue No. 82, Section A.
- Gottschalck, J., M. Wheeler, K. Weickmann, **D. Waliser**, K. Sperber, F. Vitart, N. Savage, H. Lin, H. Hendon, M. Flatau, 2008: CLIVAR Exchanges No 47, page 18.

- Waliser, D.**, J. Kim, Y. Xue, Chao, Y., A. Eldering, R. Fovell, A. Hall, Q. Li, K. Liou, J. McWilliams, S. Kapnick, R. Vasic, Fs. De Sale, and Y. Yu, 2009, Simulating the Sierra Nevada snowpack: The impact of snow albedo and multi-layer snow physics, Biennial California Climate Change Center Report, CEC-500-2008-XXX.
- Kim, J., Y. Chao, A. Eldering, R. Fovell, A. Hall, Q. Li, K. Liou, J. McWilliams, **D. Waliser**, Y. Xue, and Sarah Kapnick, 2009: A projection of the cold season hydroclimate in California in mid-21st century under the SRES-A1B emission scenario, Biennial California Climate Change Center Report, CEC-500-2008-XXX.

PROFESSIONAL SERVICE

- Member, National Research Council, National Academy of Sciences study on Intraseasonal and Interannual Climate Predictability, January 2009 to present.
- Co-chair, World Meteorological Organization (WMO) joint World Climate Research Program (WCRP)/ World Weather Research Program (WWRP) – THORPEX Program, Madden Julian Oscillation (MJO) Task Force, November 2009 – Present.
- Co-chair, World Meteorological Organization (WMO) joint World Climate Research Program (WCRP)/ World Weather Research Program (WWRP) – THORPEX Program Year of Tropical Convection Activity, March 2006 – Present.
- Co-chair, NSF Science and Technology Center, Center for Multi-Scale Modeling and Atmospheric Processes (CMMAP) Madden Julian Oscillation (MJO) Working Group. January 2008 to present.
- Member, CALIPSO/CloudSat Science Team, 2008 to present.
- Member, International Committee, 4th WMO International Workshop on Monsoons, 20-15 October 2008, Beijing, China.
- Co-Organizer, AGU Session, Year of Tropical Convection (YOTC): Status and Research Agenda, Summer AGU 2010, Iguazu, Brazil.
- Co-Organizer, AGU Session, Year of Tropical Convection (YOTC): Status and Research Agenda, Fall AGU 2009, San Francisco, CA.
- Co-Organizer, AGU Session, Tropical Convection: Observations, Theory, High-Resolution Modeling, and Parameterization, Spring AGU 2008, Toronto, Canada.
- Co-Organizer, AMS Session, Co-Organizer, Year of Tropical Convection (YOTC), January 2009, Phoenix, AZ.
- Co-Organizer, AGU Session, Year of Tropical Convection (YOTC): High-Resolution Modeling, in Situ Data, and State-of-the-Art Satellite Observations to Address the Challenge of Multiscale Organized Convection, Fall AGU 2008, San Francisco, CA.
- Co-Chair, World Meteorological Organization (WMO)/THORPEX – World Climate Research Program (WCRP) Implementation Planning Meeting for the “Year of Tropical Convection (YOTC)” Activity. Honolulu, HI, July 13-15, 2009.
- Co-Chair, World Meteorological Organization (WMO)/THORPEX – World Climate Research Program (WCRP) Scientific Planning Meeting for the “Year of Tropical Convection (YOTC)” Activity. Arlington, VA, November 13-14, 2007.
- Co-Chair, US CLIVAR New Approaches to Understanding, Simulating, and Forecasting the Madden-Julian Oscillation, Irvine, CA, November 5-7, 2007.
- Co-Organizer, Joint JPL-UCI international Satellite Observations of the Global Water Cycle Workshop (hydro.jpl.nasa.gov/sogwc.html), Irvine, CA, March 2007.
- Co-Chair, US CLIVAR Madden-Julian Oscillation Working Group (www.usclivar.org), 2006 – 2009.
- Member of the Scientific Steering Group of the World Climate Research Program’s (WCRP; wcrp.wmo.int) Climate Variability and Predictability (CLIVAR; www.clivar.org) Program, 2005 – 2009.
- Member, International Committee, 3rd WMO International Workshop on Monsoons, 2-6 November 2004, Hangzhou, China

Co-Organizer, AGU Session, Diagnosing, Modeling, and Forecasting Subseasonal Atmospheric Variability, Spring 2006, Baltimore, MD.

Co-Organizer, Intraseasonal Variability Session in the 14th Conference on Interaction of the Sea and Atmosphere, January 2006, Atlanta, GA.

Co-Organizer, AGU Session, Modeling, Simulating, and Forecasting Subseasonal Atmospheric Variability, Spring 2006, New Orleans, LA.

Interim co-chair, US CLIVAR Indian Sector Panel, December 2004 – 2005.

Co-Chair, US CLIVAR/NASA sponsored meeting June 4-5, 2003 at University of Maryland on Modeling, Simulation and Forecasting of Subseasonal Variability.

Co-Chair, effort to develop a multi-institute/multi-national Experimental MJO Prediction Program to be administered via CDC/NOAA, 2002-04.

Co-Chair, NASA-sponsored workshop on “Prospects for Improved Forecasts of Weather and Short-Term Climate Variability on Subseasonal Time Scales”. April 16-18, 2002, Greenbelt, MD.

Developer/Investigator of Long Island Sound Ferry-Based Marine and Atmospheric Observing System (www.stonybrook.edu/soundscience), 2002-04.

Member, US CLIVAR Asian-Australian Monsoon Working Group, 2001-2004.

Participant, CLIVAR Monsoon Study on GCM Asian-Australian Monsoon Intercomparison, 2001-2003.

Member, NCAR Coupled System Modeling Atmospheric Model Working Group, 1999-2003.

Member, NASA Data Analysis and Archive Center (DAAC) Working Group, Fall 1994 to Fall 1997.

Member, Sequoia 2000 Visiting Software Assessment Team (SWAT), Fall 1992 to Spring 1993.

MEDIA AND PUBLIC OUTREACH ACTIVITIES

Coastlines – New York Sea Grant Outreach Magazine, Spring 2002, “Improving the Health and Balance of New York’s Waters”. Article on the SoundScience, Long Island Sound Ferry Observation Program.

Happenings – SUNY Newspaper, September 10, 2003, “SBU and Ferry Team Up to Solve Lobster Mystery”, Article on the SoundScience, Long Island Sound Ferry Observation Program.

Village Times Herald – Long Island Newspaper, October 2, 2003, “Secrets of the sea surface with every ferry trip”, Article on the SoundScience, Long Island Sound Ferry Observation Program and Public Inauguration.

Newsday – Long Island Newspaper, October 12, 2003, “Double Duty Across the Sound”, Article on the SoundScience, Long Island Sound Ferry Observation Program and Public Inauguration.

Coastlines – New York Sea Grant Outreach Magazine, Fall 2003, “Board the Barnum”. Article on the SoundScience, Long Island Sound Ferry Observation Program.

AGU, Press Release, December 8, 2005, “Aura Satellite Tracks Earth’s Air Quality, Global Cloud Ice”, Article on Aura/EOS science, including study on MLS cloud ice and climate model fidelity, Li et al. 2005.

BBC NEWS (bbc.co.uk), December 9, 2005, “Europe’s pollution hotspots shown”, Article on Aura/EOS science, including study on MLS cloud ice and climate model fidelity, Li et al. 2005.

NASA News Feature, December 8, 2005, “NASA Satellite Eyes Atmosphere to improve Pollution and Climate”. Article on Aura/EOS science, including study on MLS cloud ice and climate model fidelity, Li et al. 2005.

JPL News Release, February 2, 2006, “Scientists Surf the Seas of Space to Catch an Atmospheric Wave”. Article on Madden-Julian Oscillation study using AIRS data. Tian et al. 2006.

Reuters, Video News Story release June 20, 2007, California Climate and Water Availability.

Eaton Canyon Nature Center Twilight Programs, Removing the Mystery of Predicting Climate Change, September 29, 2007.

von Karman Lecture, Removing the Mystery of Predicting Climate Change, October 18, & 19, 2007.

Altadena Rotary Club, An Introduction to Global Warming: What might we expect in California? November 1, 2007.

Jefferson Middle School GATE Class, An Introduction to Climate Change, JPL, November 8, 2007.

California State Legislator Tour, Discussions on Climate and Climate Change, JPL, November 23, 2007.
 AGU, Press Release, December 11, 2007, "New Frontiers in Predicting Precipitation", Reported on activities of US CLIVAR Madden-Julian Oscillation Working Group.
 Reuters, News Story release December 12, 2007, Scientists gain better view on how weather forms.
 Leader, San Gabriel / Pasadena Area Roots and Shoots Group, 6-10 Year Olds, see www.janegoodall.org and www.rootsandshootsprotecttheearth.org, August 2007 – present.
 California State University, Northridge, Planetarium Show/Lecture, Removing the Mystery of Predicting Climate Change, March 7, 2008.
 Lecture, 3 Science Classes, Showed and Discussed JPL DVD, 3rd Grade Torrey Pines Elementary School, April 2008.
 Statement, Signing of University and College Sustainability Agreement, Pasadena City College, January 2009.
 JPL Public Symposium on Climate Change, JPL Green Club, "How good are models at Predicting Climate Change?", October, 24, 2009.

INVITED PRESENTATIONS

- "The Preferred Latitudes of the Intertropical Convergence Zone", Dept. of Atmospheric Sciences, University of California, Los Angeles, CA, January 1992.
- "The Preferred Latitudes of the Intertropical Convergence Zone", Dept. of Physical Oceanography, Jet Propulsion Laboratory, Pasadena, CA, January 1992.
- "Convective Cloud Systems and High SSTs: Coupled Interactions and Self-Regulation", Pacific Marine Environmental Laboratory, Seattle, WA, April 1992.
- "Shortwave Feedbacks and ENSO: Forced Ocean and Coupled Ocean-Atmosphere Modeling Experiments", Oceanography Department, Lamont-Doherty Geological Laboratory, Palisades, NY, April 1994.
- "Four-Dimensional Ocean and Atmosphere Conditions Associated with Ocean Hot Spots", New England Physical Oceanography meeting, Woods Hole Oceanographic Institute, Woods Hole, MA, October 1994.
- "Formation and Limiting Mechanism for Very High SST: Linking the Dynamics and Thermodynamics", Climate Dynamics Branch, Goddard Space Flight Center, NASA, Greenbelt, MD, April 1995.
- "Shortwave Feedbacks and ENSO: Forced Ocean and Coupled Ocean-Atmosphere Modeling Experiments", Graduate School of Oceanography, URI, Narragansett, RI, May 1995.
- "Formation and Limiting Mechanism for Very High SST: Linking the Dynamics and Thermodynamics", Scripps Institution of Oceanography, La Jolla, CA, May 1995.
- "Climate Controls on High Sea Surface Temperature", Columbia University, NASA - Goddard Institute of Space Studies, New York, NY, April 1996.
- "Removing Satellite Equatorial Crossing Time Biases from the OLR and HRC Data Sets", NESDIS/NOAA, Camp Springs, MD., March, 1997.
- "The Influence of Coupled Sea Surface Temperatures on the Madden Julian Oscillation: A Model Perturbation Experiment ", Scripps Institution of Ocean., La Jolla, CA, April 1997.
- "The Influence of Coupled Sea Surface Temperatures on the Madden Julian Oscillation: A Model Perturbation Experiment ", Geophysical Fluid Dynamics Lab., Princeton, NJ, May 1997.
- "The Influence of Coupled Sea Surface Temperatures on the Madden Julian Oscillation: A Model Perturbation Experiment", National Center for Atmospheric Research, Boulder, CO, June 1997.
- "The Madden-Julian Oscillation: Simulation, Prediction and Sea Surface Temperature Coupling", Climate and Radiation Branch, GSFC/NASA, Greenbelt, MD, February 1998.
- "The Madden-Julian Oscillation: Simulation, Prediction and Sea Surface Temperature Coupling", Naval Research Laboratory, Monterey, CA, June 1998.
- "The Madden-Julian Oscillation: Simulation, Prediction and Sea Surface Temperature Coupling", Center for Ocean, Land and Atmosphere (COLA), Calverton, MD, November 1998.

- "The Madden-Julian Oscillation: Simulation, Prediction and Sea Surface Temperature Coupling", International Research Institute, University of California, La Jolla, CA, December 1998..
- "The Madden-Julian Oscillation: Simulation, Prediction and Sea Surface Temperature Coupling", Graduate School of Oceanography, URI, Narragansett, RI, February 1999.
- "Interannual Sea Surface Temperature Variability and the Predictability of Tropical Intraseasonal Variability", CLIVAR Monsoon Conference, Honolulu, HI, December 1999.
- "Madden-Julian Oscillation Reviews: Ocean-Atmosphere Interaction and the MJO", MJO/ENSO Workshop, GFDL, Princeton, NJ, March 2000.
- "Madden-Julian Oscillation (MJO) Prediction and Predictability", Department of Meteorology, University of Maryland, College Park, MD, April 2000.
- "Intraseasonal Oscillation in the NSIPP GCMs", NASA Seasonal to Interannual Prediction Program (NSIPP) Science Team Meeting, Greenbelt, MD, July 11-12. 2000.
- "Predictability Limits for the Intraseasonal Oscillation: Implications for Monsoon Prediction US- Japan Workshop On Monsoon Systems, NASA/GSFC, Greenbelt, MD, November 28-30, 2000.
- "Simulation and Predictability of the Madden-Julian Oscillation in the Coupled Ocean-Atmosphere System", Courant Institute of Mathematical Studies, NYU, New York, NY, May 2001.
- "Predictability Associated with the Madden-Julian Oscillation Interannual Activity & Individual Events", Geophysical Fluid Dynamics Lab., Princeton, NJ, May 2001.
- "Intraseasonal Predictability Interannual Activity & Individual Events", USCLIVAR Asian-Australian Monsoon Working Group Meeting, Washington DC, May 2001.
- "Predictability Limits for the Intraseasonal Oscillation: Implications for Monsoon", International CLIVAR Monsoon Panel Meeting, Reading University, UK, August 2001.
- "Predictability Associated with the Madden-Julian Oscillation Interannual Activity & Individual Events", Max Planck Institute, Hamburg, Germany, September 2001.
- "Intraseasonal Predictability: Implications for monsoon and weather prediction", United States CLIVAR Scientific Steering Committee Meeting, GFDL/Princeton Univ., December 2001.
- "Predictability Associated with the Madden-Julian Oscillation Interannual Activity & Individual Events", Lamont Doherty Earth Observatory, Columbia University, Palisades NY, March 2002.
- "Predictability and Forecast Issues Associated with the MJO/ISO", NASA-sponsored Workshop on Prospects for Improved Forecasts of Weather and Short-Term Climate Variability on Sub-seasonal Time Scales, Greenbelt MD, April 2002.
- "Predictability and Forecast Issues Associated with the Madden-Julian Oscillation", Research Prediction Initiative (RPI) sponsored workshop on Weather Extremes And Atmospheric Oscillations, Hamilton, Bermuda, 1-2 October 2002.
- "Indo-Pacific Ocean Response to the Madden-Julian Oscillation", Graduate School of Oceanography, URI, Narragansett, RI, November 2002.
- "Simulating and Predicting Tropical Intraseasonal Variability", Center for Ocean, Land and Atmosphere (COLA), Calverton, MD, April 2003.
- "Modeling and Predicting the Madden-Julian Oscillation: Building a Bridge Between Weather and Climate", Jet Propulsion Laboratory, Pasadena, CA, October 2003.
- "Coupled Ocean-Atmosphere Interactions and the Madden-Julian Oscillation: Implications for the Prediction of Extended-Range Weather and Short-Term Climate Variations", California Institute of Technology, Pasadena, CA, October 2003.
- "Coupled Ocean-Atmosphere Interactions and the Madden-Julian Oscillation: Implications for the Prediction of Extended-Range Weather and Short-Term Climate Variations", Climate Dynamics Branch, Goddard Space Flight Center, NASA, Greenbelt, MD, November 2003.
- "Sensitivity of MJO Predictability and Prediction to GCM and Ocean-Atmosphere Coupling", International Asian Monsoon Symposium, Honolulu, HI, 18-20 February 2004.
- "Modeling and Predicting the Madden-Julian Oscillation: Building a Bridge Between Weather and Climate", California Institute of Technology, Pasadena, CA, March 2004.

- “Intraseasonal Variations: Scientific Topics Issue”, WMO 3rd International Monsoon Workshop, Hangzhou, China, November 2004.
- “Madden-Julian Oscillation Predictability Sensitivity to Season, SST conditions, and GCM and Other Issues”, International Tropical Climate and Weather Symposium, Guangzhou, China, November 2004.
- “Monsoon Science: A Report of the WMO 3rd Workshop on Monsoons”, California Institute of Technology, Pasadena, CA, February 2005.
- “Are Physical and Biological Ocean Impacts From the MJO Important?”, JPL Ocean Group Seminar, Pasadena, CA, March 2005.
- “Modeling and Predicting the Madden-Julian Oscillation”, Department of Earth System Science, University of California, Irvine, June 1, 2005.
- “Modeling and Forecasting Issues Associated with Intraseasonal Monsoon Variations”, Pan GEWEX CLIVAR Monsoon Meeting, June 15-17, 2005.
- “Model representation of cloud process & the hydrological cycle”, Center for Hydrometeorology and Remote Sensing, University of California, Irvine, September 21, 2005.
- “Modeling and Forecasting Issues Associated with Intraseasonal Monsoon Variations”, Department of Atmospheric and Ocean Sciences, University of California, Los Angeles, February 22, 2006.
- “Predictability and Forecast Issues Associated with the Madden-Julian Oscillation”, WCRP/THORPEX Workshop on the Organization and Maintenance of Tropical Convection and the Madden-Julian Oscillation, Trieste, Italy, 13-17 March, 2006.
- “Year of coordinated Observing, modeling and Forecasting: Addressing the Challenge of Organized Tropical Convection”, Tropical Convection & The Weather Climate Interface Retreat , NCAR, Boulder, CO, 10 - 14 July 2006.
- “New Satellite Resources for Characterizing and Guiding Model Representations of Tropical Convection”, Tropical Convection & The Weather Climate Interface Retreat , NCAR, Boulder, CO, 10 - 14 July 2006.
- “Year of coordinated Observing, modeling and Forecasting: Addressing the Challenge of Organized Tropical Convection”, WCRP Working Group on Numerical Experimentation (WGNE) , NCAR, Boulder, CO, 23-27 October 2006.
- “Using Microwave Limb Sounder (MLS) Data to Evaluate Model Cloud Ice Fields”, Workshop on Parametrization of Clouds in Large-scale Models, ECMWF, Reading, UK, November 13-15 2006.
- “Year of coordinated Observing, modeling and Forecasting: Addressing the Challenge of Organized Tropical Convection”, WCRP GEWEX SSG Meeting, Honolulu, HI, 22-26 January 2007.
- “US CLIVAR MJO Working Group: MJO Simulation Metrics”, WGNE Systematic Errors Workshop, San Francisco, CA, 12-16 February 2007.
- “From Cloud-Ice to the MJO: Studies and Plans for Addressing the Tropical Convection Problem”, NSF Science and Technology Center for Multi-Scale Modeling and Atmospheric Processes (CMMAP), Maui, HI, 19-20 February 2007.
- “Year of coordinated Observing, modeling and Forecasting: Addressing the Challenge of Organized Tropical Convection”, WCRP CLIVAR Monsoon Panel Meeting, Honolulu, HI, 21-22 February 2007.
- “Year of coordinated Observing, modeling and Forecasting: Addressing the Challenge of Organized Tropical Convection”, National Academy of Sciences (NAS), Climate Research Committee (CRC), Washington, DC, May 17, 2007.
- “Exploring the Biological and Chemical Reach of the MJO: Chl, O₃ & Aerosols”, NCEP/NOAA, Camp Springs, MD, July 12, 2007.
- “Exploring the Biological and Chemical Reach of the MJO: Chl, O₃ & Aerosols”, Goddard Space Flight Center, NASA, Greenbelt, MD, July 13, 2007.

- “Year of coordinated Observing, modeling and Forecasting: Addressing the Challenge of Organized Tropical Convection”, International CLIVAR Scientific Steering Group Meeting, WMO, Geneva, Switzerland, October 2007.
- “Exploring the Biological and Chemical Reach of the MJO: Chl, O₃ & Aerosols”, State University of New York, Marine and Atmospheric Sciences, Stony Brook, NY, November, 2007.
- “US CLIVAR MJO Working Group: Efforts to Establish and Improve Subseasonal Predictions”, Fall AGU, San Francisco, CA, December 11, 2007.
- “Intraseasonal Variability and Predictability: An Overview of the Madden-Julian Oscillation”, Advanced Institute for Asian-Australian Monsoon System, U. of Hawaii, January 7, 2008
- “Cloud Ice”, Goddard Modeling and Assimilation Office, GSFC, Greenbelt, MD, February 2008.
- “Year of Tropical Convection (YOTC): A WCRP/WWRP/THORPEX Activity Addressing the Challenge of Organized Convection”, WWRP JSC, Geneva, Switzerland, July, 2008.
- “US CLIVAR MJO Working Group: Efforts to Establish and Improve MJO Predictions”, Intraseasonal Monsoon Variations and Prediction Workshop, International Centre for Theoretical Physics, Trieste, Italy, August, 2008.
- “Anthropogenic Climate Changes in California: Hydroclimate, Snowpack, and Santa Ana Winds”, Fifth Annual Climate Change Research Conference, Sacramento, CA, September 2008.
- “US CLIVAR MJO Working Group: Efforts to Establish and Improve MJO Predictions”, National Taiwan University, Tapei, Taiwan, October, 2008.
- “Exploring the Biological and Chemical Reach of the MJO : Chl, O₃ & Aerosols”, Academia Sinica, Tapei, Taiwan, October, 2008.
- “Cloud Ice: A Climate Model Challenge With Signs & Expectations of Progress”, National Central University, Tapei, Taiwan, October, 2008.
- “Year of Tropical Convection (YOTC): A WCRP/WWRP/THORPEX Activity Addressing the Challenge of Organized Convection”, Central Weather Bureau, Tapei, Taiwan, October, 2008.
- “US CLIVAR MJO Working Group: Efforts to Establish and Improve MJO Predictions”, CLIVAR Asian-Australian Monsoon Panel Meeting, Beijing, China, October, 2008.
- “Some Considerations of Multi-Scale Interactions in the Tropics”, Pan-WCRP Monsoon Cross-Cut Meeting, Beijing, China, October, 2008.
- “Year of Tropical Convection (YOTC): A WCRP/WWRP/THORPEX Activity Addressing the Challenge of Organized Convection”, 4th WMO International Monsoon Workshop, Beijing, China, October, 2008.
- “Year of Tropical Convection (YOTC): A WCRP/WWRP/THORPEX Activity Addressing the Challenge of Organized Convection”, 3rd International Workshop on High Resolution Modeling, Honolulu, HI, December 2008.
- “Year of Tropical Convection (YOTC): A Joint WWRP and WCRP Activity to Address the Challenges of Multi-Scale Organized Convection”, Fall AGU, San Francisco, CA, December 2008.
- “MJO-Related Variability over the Indian Ocean: Ocean Responses and AGCM/AOGCM Simulation Fidelity”, Fall AGU, San Francisco, CA, December 2008.
- “Mean and Variability of Vertical Structure of Cloud Liquid and Ice Water: Observations from CloudSat and Comparisons with GCMs”, Fall AGU, San Francisco, CA, December 2008.
- “US CLIVAR MJO Working Group: Efforts to Establish and Improve MJO Predictions”, CMAP Science Team Meeting, New York, NY, January 2009.
- “US CLIVAR MJO Working Group : Efforts to Establish and Improve MJO Predictions” +
 “Exploring the Biological and Chemical Reach of the MJO : Chl, O₃ & Aerosols” +
 “Cloud Ice : A Climate Model Challenge With Signs & Expectations of Progress” +
 “Year of Tropical Convection (YOTC): A WCRP/WWRP/THORPEX Activity Addressing the Challenge of Organized Convection”, Indian Institute of Tropical Meteorology, Pune, February 2009.

- “US CLIVAR MJO Working Group: Efforts to Establish and Improve MJO Predictions”, Indian Meteorology Department, New Delhi, February 2009.
- “Year of Tropical Convection (YOTC): A WCRP/WWRP/THORPEX Activity Addressing the Challenge of Organized Convection”, National Center for Medium Range Weather Forecasts, New Delhi, February 2009.
- “Motivation for Intraseasonal Prediction”, Intraseasonal to Interannual Predictability Workshop, NOAA, Silver Springs, MD, February 2009.
- “US CLIVAR MJO Working Group: Efforts to Establish and Improve MJO Predictions”, Scripps Institution of Oceanography, La Jolla, CA, March 2009.
- “Cloud Ice: A Climate Model Challenge With Signs & Expectations of Progress”, Dept. Atmospheric Sciences, Colorado State University, April, 2009.
- “Vertical Structure And Processes Revealed With Recent Satellite Data”, Multi-scale processes in the tropics, Banff Conference Series, Banff International Research Station, Canada, April 2009.
- “US CLIVAR MJO Working Group and Year of Tropical Convection: Progress and Plans”, WCRP-CLIVAR Scientific Steering Group Meeting, Madrid, Spain, May 2009.
- “US CLIVAR MJO Working Group and Year of Tropical Convection: Progress and Plans”, WCRP-VAMOS Science Panel Meeting, San Juan, Puerto Rico, June 2009.
- “Atmospheric River: Modeling and Observation Studies, CALWATER Science Planning Meeting, Scripps Institution of Oceanography, La Jolla, CA, June 2009.
- “Year of Tropical Convection (YOTC): Updates and Implementation Plans”, Implementation Planning Meeting, Honolulu, HI, July 2009.
- “Cloud Ice: A Climate Model Challenge With Signs & Expectations of Progress”, Program for Climate Model Diagnostics and Comparisons (PCMDI), Lawrence Livermore National Laboratory, September 2009.
- “Diagnostics for the Tropics: Some (Cautious) Uses of Satellite Data”, ECMWF Seminar Series, ECMWF, Reading, UK, September 2009.
- “US CLIVAR MJO Working Group, WMO Task Force and Year of Tropical Convection: Progress and Plans”, WMO Working Group on Climate Modeling, Annual Meeting, San Francisco, CA, September 2009.
- “Decadal Climate Prediction and the IPCC”, NASA’s California Water Resources Workshop, Pasadena, CA, October 2009.
- “Cloud-Ice: Modeling and Observing The Hard Part of the Clouds”, ESE Seminar Series, Caltech, Pasadena, CA, Oct. 2009.
- “Year of Tropical Convection”, World Meteorological Organization, 15th Session, Commission on Atmospheric Sciences, Incheon Korea, Nov 2009.
- “Year of Tropical Convection”, World Meteorological Organization, 15th Session, Commission on Atmospheric Sciences (CAS), Pre-CAS Science, Incheon Korea, Nov 2009.
- “Year of Tropical Convection (YOTC): Status and Research Agenda”, Fall AGU, San Francisco, CA, December 2009.
- “SP-CAM Subgrid-scale / CRM Variability in the MJO and MJO Task Force”, CMMAP Science Team Meeting, La Jolla, CA, January 2010.
- “Observations for CMIP5 Simulations”, Workshop on Ensuring Access and Trustworthiness of Climate Observations and Models for Society, NCDC, Asheville, NC, March 2010

ADVISING

HIGH SCHOOL AND UNDERGRADUATE

- Matthew Gross, SUNY Summer Research Institute for High School Students, 1999.
- Joseph Giannotti, SUNY Atmospheric Sciences, NWS/NOAA Support, 2002-03.
- Michele Balcom, SUNY Atmospheric Sciences, NSF/RAIRE Fellowship, 1998.
- Tomasz Tyranowski, University of Krakow, Poland, Caltech Summer Program, with Prof. Yung, 2006.

Mentor, Andrew Atwong, GATE Science Project, Paper on Global Change, Spring 2008.
Colin Logan, Caltech, Caltech Summer Program, with Prof. Yung, 2009.
Ben Slawski, Caltech, Caltech Summer Program, with Prof. Yung, 2009.

GRADUATE STUDENTS

Wufeng Zhou, SUNY M.S., graduated 9/96.
Zhixiong Shi, SUNY M.S., graduated 9/97.
Sandy Lucas, SUNY M.S., graduated 8/99.
Zhenzhou Zhang, SUNY M.S., graduated 8/99.
Masha Medovaya, SUNY M.S., graduated 12/99.
Yangxing Zheng, SUNY M.S., graduated 6/03.
Travis Baggett, SUNY, M.S., 9/02-9/04.
Yasmine Bennouna, Foreign M.S. Internship, 3/02-8/02.
Sandy Lucas, SUNY Ph.D, graduated 12/07.
King-Fai Li, Caltech, Ph. D. student, Committee Member. 2009-present.

POSTDOCTORAL & RESEARCH SCIENTISTS

Stefan Liess, University of Stony Brook, 2003-2005.
Jui-Lin (Frank) Li, JPL Scientist, 2004-present.
Baijun Tian, Caltech Postdoc, 2004-2007.
Jon Bergengren, JPL/Caltech Postdoc, 2004-2006.
Xianan Jiang, JPL/Caltech Postdoc, 2006-2008.
Christopher Woods, JPL/Caltech Postdoc, 2006-2008.
Ki-Weon Seo, NPP/NRC Postdoc, 2005-2007.
Terry Kubar, NPP Postdoc, 2008-present.
Bin Guan, JPL/Caltech Postdoc, 2009-present.
Ju-Me Ryoo, JPL/Caltech Postdoc, 2009-present.
Wei-Ting (Anne) Chen, JPL/Caltech Postdoc, 2009-present.

TEACHING

UNIVERSITY OF CALIFORNIA, LOS ANGELES

AOS 102 – Climate Change and Climate Modeling (Undergraduate Survey Course), Spring 2008.

UNIVERSITY OF HAWAII, *Advanced Institute for Asian-Australian Monsoon System*

Guest Lecture – *Intraseasonal Variability and Predictability: An Overview of the Madden-Julian Oscillation*, 2-12 January 2008

CALTECH

2 Guest Lectures – *An Overview of the Madden-Julian Oscillation*

ESE/Ge 173: Topics in Atmosphere and Ocean Dynamics: Tropical Atmosphere Dynamics, Fall 2007, Instructor: T. Schneider.

STATE UNIVERSITY OF NEW YORK

ATM 205, Introduction to Atmospheric Science (Undergraduate Survey and Atmospheric Science Core Course), 2002, 2003.

ENS/PHY 119, Environmental Physics (Undergraduate Survey and Environmental Studies Core Course), 2001.

ATM 345, Theoretical Meteorology (Undergraduate Atmospheric Science Core Course), 1997, 1998, 2000.

ATM 346, Dynamic Meteorology (Undergraduate Atmospheric Science Core Course), 1999, 2001, 2003, 2004.

MAR 593, Theoretical Meteorology (Graduate Atmospheric Science Core Course), 1993, 1994, 1995, 1996.

MAR 528, Large-Scale Ocean Atmosphere Interaction (Graduate Elective Course), 1994, 1996, 1998, 2002.
OCN 694, Seminar in Atmospheric Sciences (Required Atmospheric Science Graduate Course), 1997, 2002, 2003, 2004.

INSTITUTIONAL SERVICE

STATE UNIVERSITY OF NEW YORK

Member, Marine Sciences Research Center (**MSRC**) Electronic Shop Advisory Committee, Spring 2003 to present.
Member, Search Committee, MSRC Assistant Dean, Spring 2003.
Co-Developer/Investigator of Long Island Sound Ferry-Based Marine and Atmospheric Observing System (www.stonybrook.edu/soundscience), 2002-04.
Member, SUNY Academic Senate, December 2001 to December 2002.
Member, Arts and Sciences Senate, December 2001 to December 2002..
Member, Institute for Terrestrial and Planetary Atmospheres (**ITPA**) Departmental Examination Committee, Fall 2001 to present.
Member, MSRC Electronics Shop Evaluation Committee, Spring-Fall 2002.
Member, MSRC Graduate Program Committee, Fall 2000 to present.
Member, MSRC Undergraduate Program Committee, Fall 2000 to Summer 2001.
Member, ITPA Atmospheric Dynamicist Search Committee, Winter/Spring 2001.
Contributed to SUNY's successful application for Internet2 Service, Spring 1999.
Chair, MSRC Computer Personnel Task Force, Summer 1999.
Member, MSRC Faculty Advisory Committee, Summer 1998 to Fall 1998.
Member, MSRC Macro-Project Committee, Spring 1998 to Fall 1998.
Member, MSRC Physical Oceanography Search Committee, Spring/Summer 1998.
Member, MSRC Faculty Salary Survey Task Force, Spring 1998.
Member, MSRC Admissions Committee, Fall 1996 to Summer 1999.
Member, MSRC Graduate Program Committee, Fall 1994 to Fall 1997.
Chair, ITPA Departmental Examination Committee, Fall 1994 to Summer 1999.
Member, Environmental Studies Curriculum Working Group, Summer 1995 to Spring 1997.
Organize ITPA/MSRC Seminar Series, Spring 1994 to Fall 1995.

JPL

Earth and Space Science Colloquium Contact: V. Ramanathan (Scripps), 2010 Visit.
Co-lead, Observations and IPCC, for Global Change and Energy Science Advisory Group and Earth Science and Technology Directorate, 2009-present.
Co-lead/member, Water Cycle Theme Development, Earth Science and Technology Directorate, Meetings convened with C. Elachi and M. Friele. 2009.
Co-Chair, Office of the Chief Scientist and Earth Sciences Division Search Committee, Senior Climate Scientist Position, 2009 - present.
Chair, Earth Sciences Division Search Committee, Offers for Painter, Fisher & Matheou, 2009.
Member, JPL Chief Earth Scientist, Global Change and Energy Science Advisory Group, Spring 2008 – present.
Earth and Space Science Colloquium Contact: J. Meehl (NCAR), 2009 Visit.
Member, JIFRESSE Promotion Committee, 2009 – present.
Member, JIFRESSE Executive Committee, 2008 – present.
Member, Ed Stone Award Committee, 2008.
Member, Cloud-Aerosol Scientist Hire Search Committee, Offers for D. Wu and A. Davis, Winter 2008.
von Karman Lecture, Removing the Mystery of Predicting Climate Change, October 18, & 19, 2007.
Member, PATH (NRC Decadal Study Recommended Geostationary Sounder) Science Working Group, Spring 2007 - present.

Member, Ed Stone Award Committee, 2007.
 Member, Hydrology Strategic Hire Search Committee, Offer for Molotch, Spring 2007.
 Co-Initiator, UCLA-JPL Joint Institute for Regional Earth System Science and Engineering (JIFRESSE; www.jifresse.ucla.edu), 2005-06.
 Co-Organizer, JPL-UCI Satellite Observations of the Global Water Cycle Workshop, Irvine, CA, March 2007.
 Member, Principal Promotion Advisory Board, Division 32, 2007.
 Two Senior (Internal) Reviews: CloudSat, AIRS, 2007.
 Member, Ed Stone Award Committee, 2006.
 AIRS News Release, Scientists Surf the Seas of Space to Catch an Atmospheric Wave , February 02, 2006
 JPL 101 Lecture, Removing the Mystery of Predicting Climate Change, July 2006.
 NASA Group Achievement Award, Aura MLS Science Team, 2006
 Three Senior (Internal) Reviews: GRACE, GPS, TOPEX, 2006.
 Co-I on two NRC Decadal Study Mission Concepts, CAMEO, AIRES, 2006.
 AGU Fall 2005 Press Release, Cloud Ice Discoveries From the Microwave Limb Sounder (MLS): Comparisons With Global Weather & Climate Models.
 CloudSat Pre-Ship Review Board, Feb. 2005.

RESEARCH FUNDING

FUNDED AWARDS

Relationship Between Clouds, SST and Surface Fluxes on Seasonal & Interannual Time Scales Over the Western Pacific, PI: Waliser (SUNY) and co-PI: Gautier (UCSB), **NSF**, \$171k, 1994-97.
 Large-Scale Convection: Local and Remote Interactions in the Pan-American Climate System, PI: Waliser (SUNY), **PACS/NOAA**, \$96k, 1995-97.
 Analysis of the Shortwave Cloud Forcing and Surface Shortwave Flux in the Meteorological and Oceanographic (METOC) Modeling and Prediction Systems, PI: Waliser (SUNY), **ONR**, \$230k, 1997-2000.
 Removing Satellite Equatorial-Crossing-Time Biases from the Global Outgoing Longwave Radiation Data Set, PI: Waliser (SUNY) and co-PI: Janowiak (NCEP/NOAA), **NOAA/NASA**, \$109k, 1997-99.
 The Nature and Predictability of the Madden-Julian Oscillation in the Coupled Ocean-Atmosphere System. PI: Waliser (SUNY), co-PI: Jones (UCSB), co-Is: Lau (GSFC/NASA) and Schemm (NCEP/NOAA), **NSF**, \$245k, 1998-2000.
 Earth Remote Sensing Facilities for Research and Teaching at the State University of New York at Stony Brook, PI: Geller (SUNY), co-PIs: Lwiza, Waliser, Zhang, Cess, Lerdau, **NASA**, \$105, 1998-99.
 Ocean Buoy Shortwave (OBS): A Data Set for Satellite Retrieval and GCM Validation. Waliser (SUNY), co-Is: Weller (WHOI), McPhaden (PMEL/NOAA) and Wielicki (Langley/NASA), **NASA**, \$126k, 1998-2000.
 Water Vapor Variations Associated with the Life Cycle of the MJO: Analysis of NCAR CCM and TOVS Pathfinder, PI: Waliser (SUNY), **NSF**, 25k, 1999-2000.
 Acquisition of a Real-Time Satellite Receiving System for Regional Environmental Research and Education, PI: Waliser (SUNY), co-PI: J. Tichler (BNL), **SUNY President's Office**, \$76k, 1999-2000.
 Intraseasonal Variability in the Indian Ocean: Scale Interactions and Climate Impacts, PI: Waliser (SUNY) and co-PI: Murtugudde (U. Maryland), **NASA**, \$299k, 2000-03.
 The Relationship Between American Lobster Mortality in Long Island Sound and Prevailing Environmental Water Column Conditions, PI: Wilson (SUNY), co-Is: Waliser and Swanson (SUNY), **NY & CT Sea Grant/NOAA**, \$176k, 2001-03.

The Nature and Predictability of the Madden-Julian Oscillation in the Coupled Ocean-Atmosphere System. PI: Waliser (SUNY), co-PI: Jones (UCSB), co-Is: Lau (GSFC/NASA) and Stern (GFDL/NOAA), **NSF**, \$372k, 2001-2004.

A Ferry-Based Observing System for Long Island Sound: Application to Physical Influences on Hypoxia, PI: Waliser (SUNY), co-PI: Wilson (SUNY), co-I: Reynolds (BNL), **NY Sea Grant**, \$243k, 2002-2004.

Exploring the Benefits and Limits of Dynamical Predictions of the Tropical Intraseasonal Oscillation: Steps Towards an Experimental Prediction Program, PI: Waliser (SUNY), co-Is: Schubert (GSFC/NASA), Stern (GFDL/NOAA) and M. Latif and S. Liess (MPI), **OGP/NOAA**, \$324k, 2001-04.

Using Ferry-Based Marine And Atmospheric Observations To Improve Our Understanding And Modeling Capabilities Of Long Island Sound Hypoxia And The Roles Of Natural Versus Anthropogenic Forcing, PI: Wilson (SUNY), co-PI: Waliser (SUNY), **EPA**, \$120k, 2004-05.

Dynamical Predictability and Present-Day Forecast Skill of the Subseasonal Variability, PI: Waliser (JPL), co-Is: Schubert (GSFC/NASA), Kirtman (COLA/GMU), Pan (NCEP/NOAA), **OGP/NOAA**, \$182k, 2005-06.

Atmospheric Hydrological Cycle Thrust, PI: Waliser (JPL), co-Is: Salawitch and Gunson (JPL), **RTD/JPL**, \$600k, 2004-07.

Exploiting Satellite Observations And Cloud-Resolving Models To Improve GCM Representations Of Cloud-Radiation-Dynamical Interactions, PI: Waliser (JPL), co-Is: Yung (Caltech), Kuang (Harvard), Wu (GSFC/NASA), **MAP/NASA**, \$300k, 2005-06.

Pathways to predictability on subseasonal time scales: assessing the role of tropical forcing and land surface conditions, PI: Schubert (GSGC/NASA), 9 other Co-Is including Waliser (JPL), **MAP/NASA**, \$1.5M, 2005-10.

A Merged Atmospheric Water Data Set from the A-Train, PI: Fetzer (JPL), several other co-Is including Waliser (JPL), **NEWS/NASA**, \$1.5M, 2005-10.

Investigation of climatic impacts on US west coast atmospheric and terrestrial processes using numerical downscaling techniques, PI: Waliser (JPL), co-I: Xue (UCLA), **DRDF/JPL**, \$25k, 2006-07.

Predictability and Model Verification of the Water and Energy Cycles: Linking Local, Regional and Global Scales, PI: Waliser (JPL), co-I: Schubert (GSFC/NASA), **NEWS/NASA**, \$600k, 2007-10.

Coupling Regional and Global Processes: Towards the Next Generation of Space Missions, PI: Waliser (JPL), co-Is: Liou, Xue, Hall, Fovell (UCLA) and Li, Eldering and Chao (JPL), **DRDF/JPL**, \$200k, 2006-07.

Deriving a PBL Height Climatology from GPS and AIRS: A Valuable Resource for Evaluating and Improving Weather and Climate Models, PI: Waliser (JPL), co-I: Ao (JPL), **Spont. Concept/RTD/JPL**, \$30k, 2007.

Integrating CloudSat and A-Train Observations of Upper-Tropospheric Cloud and Hydrological Processes: Application to GCM Evaluation and Improvement: PI: Waliser (JPL), **CloudSat Mission Support/JPL**, ~200k/yr, 2007-2010.

Using Large Inland Water Bodies to Characterize and Predict Regional Climate Change, PI: Hook (JPL), co-I: Waliser (JPL), PI: S. Hook (JPL), **EOS/NASA**, \$450k, 2007-10.

PBL Height Climatology from GNSS/RO Measurements: A New Resource for Evaluating and Improving Weather and Climate Models, PI: Ao (JPL), co-I: Waliser (JPL), **NASA**, \$460k, 2007-10.

Evaluating Key Uncertainties in IPCC Climate Change Projections of California Snowpack: Topography, Snow Physics, and Aerosol Deposition, PI: Waliser (JPL), co-Is: Liou, Xue, Hall, Fovell, Kim (UCLA) and Li, Eldering, Chao, Saatchi (JPL), **DRDF/JPL**, \$200k, 2007-08.

Observationally Constrained Climate Prediction and Risk Assessment, PI: Teixeira (JPL), co-Is: A. Braverman, K. Bowman, R. Duren, A. Eldering, E. Fetzer, C. Miller, M. Santee, D. Waliser (JPL), **RTD/JPL**, \$200k, 2008.

Judicious Application of Satellite Observations To Evaluate And Improve Cloud Ice and Liquid Water Representations In Conventional and Multi-Scale Weather & Climate Models, **NASA/MAP**; Commitment: PI; 0.15; Period: 2008-2012, Total Amount: 1,200k.

Improving the representation of shallow cumulus convection in coupled systems: Integrating satellite observations, high-resolution models and new parameterizations **NASA/MAP**; Commitment: co-I; 0.08; J. Teixeira/JPL PI; Period: 2008-2012, Total Amount for co-I: 80k.

Physical-Biological Interactions Associated with Tropical Subseasonal Variability and Their Impacts on SST **NASA/PO**; Commitment: co-PI; 0.12; R. Murtugudde/UMD PI; Period: 2008-2012.

Intraseasonal Variations of Atmospheric Composition and Their Connection to the Madden-Julian Oscillation: Satellite/In-Situ Data Analysis and Chemistry/Transport Modeling, **NSF**; Commitment: co-PI; 0.08; B. Tian/UCLA PI; Period: 2009-2012.

Observationally Constrained Climate Prediction and Risk Assessment, PI: Teixeira (JPL), co-I: among others, D. Waliser (JPL), **RTD/JPL**, \$400k, 2009.

Northward Propagation Mechanisms of Subseasonal Eastern Pacific ITCZ Variability: Connections between Extreme Events, Subseasonal and Interannual Variability, **NOAA**; Commitment: co-PI; 0.08; X. Jiang/UCLA PI ; Period: 2009-2012.

Vertical heating structure in large-scale coupled tropical waves, **NSF**; Commitment: co-PI; 0.08; X. Jiang/UCLA PI, 2009-2012.

CONFERENCES AND WORKSHOPS

Contact duane.waliser@jpl.nasa.gov for complete list.